

200311566-1

RECEIVED
CENTRAL FAX CENTER
JAN 05 2007

10/661,153

REMARKS

This is a full and timely response to the non-final Official Action mailed October 5, 2006. Reconsideration of the application in light of the above amendments and the following remarks is respectfully requested.

Claim Status:

Claims 1-11, 44-60 and 66-68 were withdrawn from consideration under the imposition of a previous Restriction Requirement and have been cancelled by the present paper. The withdrawn claims are cancelled without prejudice or disclaimer. Applicant reserves the right to file any number of continuation or divisional applications to the withdrawn claims or to any other subject matter described in the present application.

By the forgoing amendment, the specification and various claims have been amended. Additionally, new claims 69-71 have been added. Thus, claims 12-43, 61-65 and 69-71 are currently pending for further action.

Prior Art:

The sole issue raised in the recent Office Action was a rejection of all pending claims as anticipated under 35 U.S.C. § 102(b) by U.S. Patent App. Pub. No. 20020071977 to Lakshmanan et al. ("Lakshmanan"). For at least the following reasons, this rejection is respectfully traversed.

Claim 1 recites:

A fuel cell assembly, comprising:
a fuel cell having an anode, a cathode, and an electrolyte; and
an integral fuel cartridge and air filter apparatus having
a fuel cartridge,
a filter housing coupled to said fuel cartridge, and

200311566-1

10/661,163

an air filter for cleaning air being supplied to said cathode, said air filter being coupled to said filter housing;
wherein said integrated fuel cartridge and filter apparatus is coupled to said fuel cell.
(Emphasis added).

Independent claim 27 similarly recites:

An electronic apparatus, comprising:
a power consuming device;
a fuel cell system providing power to said power consuming device; said fuel cell system having a fuel cell having an anode, a cathode, and an electrolyte;
an integral fuel cartridge and air filter apparatus having a fuel cartridge, a filter housing coupled to said fuel cartridge, and *an air filter for cleaning air being supplied to said cathode*, said air filter being coupled to said filter housing; and
wherein said integrated fuel cartridge and filter apparatus is coupled to said fuel cell.
(Emphasis added).

In contrast, Lakshmanan does not teach or suggest the claimed air filter for cleaning air being supplied to a cathode of a fuel cell. Moreover, Lakshmanan does not teach or suggest such an air filter in an integral assembly with a fuel cartridge for the fuel cell.

Lakshmanan teaches, in Fig. 1, "a fuel cell system 20 includes a fuel cell stack 30 having a plurality of fuel cells 35. Fuel cell system 20 also includes an anode gas supply 40, a filter inlet line 45, a carbon monoxide (CO) filter 50, an anode gas inlet line 60, an anode gas outlet line 70, a cathode gas inlet line 80, a cathode gas outlet line 90, a coolant inlet line 100, and a coolant outlet line 110." (Lakshmanan, paragraph 0045).

Thus, Lakshmanan teaches a fuel supply (40) for the anode of a fuel cell system with a CO filter (50) that removes CO from the fuel being input to the fuel cell system. There is no air filter that is associated with or integrated with the fuel gas supply (40), as claimed. Rather, the cathode gas inlet line (80), which provides oxidant for the cathode of the fuel cell system, is entirely separate from the fuel supply line (40, 45) and includes no filter. Lakshmanan does not ever teach, suggest or even mention the claimed air filter.

200311566-1

10/661,153

Thus, Lakshmanan fails to teach or suggest the claimed air filter that is part of an integral fuel cartridge and air filter apparatus. "A claim is anticipated [under 35 U.S.C. § 102] only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987) (emphasis added). See M.P.E.P. § 2131. For at least these reasons, the rejection based on Lakshmanan should be reconsidered and withdrawn.

The various dependent claims of the application recite additional subject matter that is further patentable over Lakshmanan. Specific, non-exclusive examples follow.

Claim 14 recites "wherein said filter is fluidly coupled to said cathode." Claim 29 recites similar subject matter. In contrast, as demonstrated above, Lakshmanan does not teach or suggest any filter that is fluidly coupled to the cathode of a fuel cell.

Claim 15 recites "wherein said filter housing is coupled directly to a distal end of said fuel cartridge." Claim 30 recites similar subject matter. In contrast, as shown in Fig. 1 of Lakshmanan, there is no filter coupled directly to the gas supply (40).

Claim 16 recites "wherein said filter housing is coupled to a distal end of said fuel cartridge, and wherein a proximal end of said fuel cartridge comprises a fuel outlet." Claim 31 recites similar subject matter. In contrast, Lakshmanan does not teach or suggest a fuel outlet at a proximal end of a fuel cartridge and a filter housing coupled to an opposite, distal end of the fuel cartridge.

Claim 17 recites "wherein said filter housing is coupled to distal and proximal ends of said fuel cartridge and said filter at least partially surrounds said fuel cartridge between said

200311566-1

10/661,153

distal and proximal ends." Claim 32 recites similar subject matter. In contrast, Lakshmanan does not teach or suggest any of this subject matter.

Claim 18 recites "wherein said filter housing further comprises spacing ribs extending at least partially between said distal and proximal ends." Claim 33 recites similar subject matter. In contrast, Lakshmanan does not teach or suggest this subject matter.

Claim 19 recites "a handle coupled to a distal end of said fuel cartridge." Claim 34 recites similar subject matter. In contrast, Lakshmanan does not teach or suggest this subject matter.

Claim 23 recites "a pre-filter in fluid communication with said filter and with said fuel cell." Claim 39 recites similar subject matter. Claim 24 recites "wherein said pre-filter is in fluid communication with said filter and said pre-filter is in direct fluid communication with a heat removing system of said fuel cell." Claim 43 recites similar subject matter. In contrast, Lakshmanan does not teach or suggest any of this subject matter.

Claim 25 recites "wherein said filter housing is coupled to a top portion of said fuel cartridge and is configured to engage latching tabs disposed on a housing of said fuel cell." Claim 40 recites similar subject matter. In contrast, Lakshmanan does not teach or suggest this subject matter.

Claim 26 recites "a filter gasket disposed between said filter housing and said fuel cell housing and a fuel gasket disposed between said fuel cartridge and said fuel cell housing." Claim 41 recites similar subject matter. In contrast, Lakshmanan does not teach or suggest this subject matter.

For at least these additional reasons, these dependent claims are clearly patentable over the teachings of Lakshmanan. Thus, the rejection of these claims should be reconsidered and withdrawn.

200311566-1

10/661,153

Conclusion:

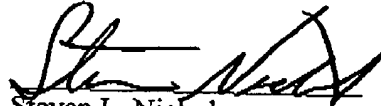
The newly added claims are thought to be patentable over the prior art of record for at least the same reasons given above with respect to the original independent claims.

Therefore, examination and allowance of the newly added claims is respectfully requested.

For the foregoing reasons, the present application is thought to be clearly in condition for allowance. Accordingly, favorable reconsideration of the application in light of these remarks is courteously solicited. If the Examiner has any comments or suggestions which could place this application in even better form, the Examiner is requested to telephone the undersigned attorney at the number listed below.

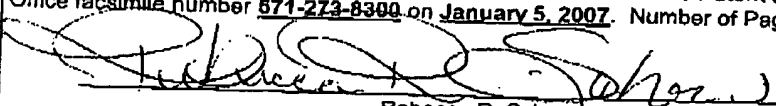
Respectfully submitted,

DATE: January 5, 2007


Steven L. Nichols
Registration No. 40,326

Steven L. Nichols, Esq.
Managing Partner, Utah Office
Rader Fishman & Grauer PLLC
River Park Corporate Center One
10653 S. River Front Parkway, Suite 150
South Jordan, Utah 84095

(801) 572-8066
(801) 572-7666 (fax)

<p align="center">CERTIFICATE OF TRANSMISSION</p> <p>I hereby certify that this correspondence is being transmitted to the Patent and Trademark Office facsimile number <u>571-273-8300</u> on <u>January 5, 2007</u>. Number of Pages: <u>17</u></p> <p align="center"> Rebecca R. Schow</p>
--